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| APPLICATION NO.                                 | FILING DATE       | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------------|----------------------|---------------------|------------------|
| 10/627,407                                      | 07/25/2003        | Norman Poirier       | PCC115              | 2821             |
| 32047 7   | 7 7590 03/22/2005 |                      | EXAMINER            |                  |
|   | I, TUCKER, PERREA | SCHINDLER, DAVID M   |                     |                  |
| 55 SOUTH COMMERICAL STREET MANCHESTER, NH 03101 |                   |                      | ART UNIT            | PAPER NUMBER     |
| WHI II (OILD) I                                 |                   |                      | 2862                |                  |

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|----|--|

|   | Application No.  | Applicant(s)                |  |  |  |  |
|---|--|-----------------------------|--|--|--|--|
| Office Action Summans   | 10/627,407   | POIRIER ET AL.              |  |  |  |  |
| Office Action Summary   | Examiner   | Art Unit                    |  |  |  |  |
|   | David Schindler  | 2862                        |  |  |  |  |
| The MAILING DATE of this communication app Period for Reply   | ears on the cover sheet with the c                             | orrespondence address       |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |  |                             |  |  |  |  |
| Status  |  |                             |  |  |  |  |
| 1)⊠ Responsive to communication(s) filed on <u>26 January 2004</u> .  |  |                             |  |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) This  |  |                             |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |                             |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |  |                             |  |  |  |  |
| Disposition of Claims   |  |                             |  |  |  |  |
| 4) Claim(s) 1-7 is/are pending in the application.  |  |                             |  |  |  |  |
| 4a) Of the above claim(s) is/are withdraw   | 4a) Of the above claim(s) is/are withdrawn from consideration. |                             |  |  |  |  |
| 5) Claim(s) is/are allowed.   |  |                             |  |  |  |  |
| 6) Claim(s) is/are rejected.  |  |                             |  |  |  |  |
| 7) Claim(s) is/are objected to.   |  |                             |  |  |  |  |
| 8) Claim(s) <u>1-7</u> are subject to restriction and/or ele  | ection requirement.  |                             |  |  |  |  |
| Application Papers  |  |                             |  |  |  |  |
| 9) The specification is objected to by the Examiner.  |  |                             |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.  |  |                             |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |                             |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |  |                             |  |  |  |  |
| 11) ☐ The oath or declaration is objected to by the Ex  | aminer. Note the attached Office                               | Action or form PTO-152.     |  |  |  |  |
| Priority under 35 U.S.C. § 119  |  |                             |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:   |  |                             |  |  |  |  |
| 1. Certified copies of the priority documents have been received.   |  |                             |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |  |                             |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |  |                             |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |  |                             |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |  |                             |  |  |  |  |
| Attachment(s)   |  |                             |  |  |  |  |
| 1) Notice of References Cited (PTO-892)   | 4) Interview Summary   | (PTO-413)                   |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Da  | nte                         |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  | 6) Other:  | atent Application (PTO-152) |  |  |  |  |

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## Election/Restrictions

**DETAILED ACTION** 

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - Claims 1-3, drawn to a phase angle detection system, classified in class
     324, subclass 207.25.
  - Claims 4-5, drawn to a rotary sensor system, classified in class 324, subclass 207.25.
  - III. Claims 6-7, drawn to a shaft coupling configuration for a rotary sensor system, classified in class 324, subclass 207.23.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case:

Invention I, claims 1-3, does not require the particulars of Invention II, namely in that it does not require magnetic sensors adapted to provide respective first, second, and third outputs equal to  $A\cos(\theta)$ ,  $A\cos(\theta-120^\circ)$ , and  $A\cos(\theta-240^\circ)$  in response to an angular displacement,  $\theta$  of a magnet. Invention I, claims 1-3, does not require the particulars of Invention III, namely in that it does not require a Geneva cam. In the instant case, Invention I has separate utility such as a device requiring a PWM generator circuit. See MPEP § 806.05(d).

Invention II, claims 4-5, does not require the particulars of Invention I, namely in

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that it does not require a PWM generator circuit. Invention II, claims 4-5, does not require the particulars of Invention III, namely in that it does not require a Geneva Cam. In the instant case, Invention II has separate utility such as a device requiring magnetic sensors adapted to provide respective first, second, and third outputs equal to  $A\cos(\theta)$ ,  $A\cos(\theta-120^\circ)$ , and  $A\cos(\theta-240^\circ)$  in response to an angular displacement,  $\theta$  of a magnet. See MPEP § 806.05(d).

Invention III, claims 6-7, does not require the particulars of Invention I, namely in that it does not require a PWM generator circuit. Invention III, claims 6-7, does not require the particulars of Invention II, namely in that it does not require require magnetic sensors adapted to provide respective first, second, and third outputs equal to  $A\cos(\theta)$ ,  $A\cos(\theta-120^\circ)$ , and  $A\cos(\theta-240^\circ)$  in response to an angular displacement,  $\theta$  of a magnet. In the instant case, Invention III has separate utility such as a device requiring a Geneva Cam. See MPEP § 806.05(d).

- 3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Groups II and III, and the search required for Group II is not required for Groups I and III, and the search required for Group III is not required for Groups I and II, restriction for examination purposes as indicated is proper.
- 4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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5. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Schindler whose telephone number is (571) 272-2112. The examiner can normally be reached on M-F (8:00 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**David Schindler** 

Y JAY PAHDAH PRIMARY EXAMINER